USA Select

Scene Metadata Interpretation Guide

IDN- Corresponds to the SPOT scene ID. The Scene ID can be broken down into the following blocks:

> "2" (SPOT Satellite Number) - "123 456" (KJ Satellite Grid Site) - "950627" (Acquisition Date-yymmdd)- "120000" (Greenwich Mean Time of Acquisition) - "1" (HRV Sensor) - "X" (spectral mode)

SAT-This refers to which satellite acquired the data. Scenes acquired on SPOT 1, 2, and three can be acquired as 10 Meter Panchromatic (black and white) or 20 Meter, 3 band Multispectral

KJ -- A grid system used to locate scene locations based on satellite orbit. The K Grid represents the longitudinal positioning of the scene. The J Grid represents the latitudinal positioning of the scene along the orbit's path.

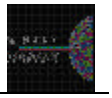
Date_yymmdd-- The calendar date of the scene acquisition. This is shown as the two digit year, two digit month, and two digit day.

Time-- UTC. The total time of scene acquisition equates to roughly nine seconds.

HRV-- Each SPOT Satellite has two High Resolution Visible sensors. Each can acquire scenes in both Panchromatic and Multispectral modes.

Spectral—This is the spectral mode in which the scene was acquired.

X for Multispectral (3 band data acquired using SPOT 1, 2, or 3). This is also referred to as XS data. The three bands are Red, Green and Near-IR.
P for Panchromatic (10 meter black and white data acquired using SPOT 1, 2 or 3)
M for Monochromatic (10 meter black and white data acquired using SPOT 4)
I for four-band Multispectral (4 band data acquired using SPOT 4. This is also referred to as XI. The Four band are Red, Green, Near-IR and Mid-IR.



Clouds

There are two types of cloud ratings currently in use:

NUMERICAL-- A cloud rating is manually assigned to each quadrant of the scene. 0 is used for 0-10 percent clouds visible in a quadrant; 1 is used for 10-25 percent clouds visible in a quadrant; and 2 is used for over 25 percent clouds visible in a quadrant. The ratings read left to right from top to bottom (e.g. NW corner, NE corner, SW corner, SE corner).

ALPHABETICAL -- A more recent system of manual/automated cloud rating. Each scene is divided into eight quadrants, four to the eastern and four to the western side of a bisected image. Again the ratings read left to right and from top to bottom (e.g. NW corner, NE corner, NW upper middle, NE upper middle, SW lower middle, SE upper middle, SW corner, SE corner). A cloud system (A through E) is used to better distinguish cloud cover. Each letter can be interpreted in the following manner: A represents 0% clouds; B represents 0-10% clouds, C represents 10-25% clouds, D represents 25-75% clouds, and E represents 100% clouds.

Incident Angle (I Angle)

The SPOT HRV sensors can be angled up to 31 degrees in order to acquire a scene. A positive incident angle denotes an east look from nadir The negative incident angle represents a west look from the nadir point. In the case of a SPOT image, nadir is taken as the point at which the HRV would incur no incident angle.

Shift Range

A SPOT scene can be shifted “downward” along its track. In this case the scene is processed so that the first line has been moved incrementally south along its orbital path. SPOT has the capability to produce a scene shift in values of tenths along its track. For instance, a scene with a Shift Value of .5 has been moved fifty percent along its path. A Shift Range gives the possible shift values in tenths.

Corner Points

The series of four coordinates represents the approximate corner point of the scene. These can be interpreted, like the numerical cloud rating, in a clockwise fashion (NW = top right, NE = top left, SW = bottom left, SE = bottom right of the printed scene id coordinates.

The center point is set off to the right of the four corner points. All scene searches are based upon scene center points.